Ti Host status of different cover crops for *Pratylenchus penetrans*

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Cover crops that are poor or non-hosts are effective in reducing nematode population densities below damaging levels. Greenhouse experiments were conducted to evaluate the host status of nine cover crops to *Pratylenchus penetrans*. The average number of nematodes per root systems and the nematode multiplication rate (ratio of final population density to initial population density = Pf/Pi) were determined 10 weeks after inoculation with 745 mixed stage nematodes of *P. penetrans*. The cover crops tested were common bird’s foot (*Ornithopus sativus*), forage rape (*Brassica napus*), rape seed (summer oil type) (*Brassica napus*), Italian ryegrass cv. Tetraflorum (*Lolium italicum*), common vetch (*Vicia sativa* subsp. nigra), Sunflower (*Helianthus annuus*), lentil (*Lens culinaris*), buckwheat (*Fagopyrum esculentum*), fodder radish RSAS1037 (*Raphanus sativus*). Maize (*Zea mays*) and French marigold (*Tagetes patula*) were included as susceptible and non-host controls respectively. The results indicated that the susceptible control maize supported only a low level of nematode reproduction which was not expected. However, most of the cover crops tested supported significant levels of nematode reproduction. The highest nematode multiplication rate was obtained in lentil (Pf/Pi = 45.9) followed by common vetch (Pf/Pi = 19) and rape seed (Pf/Pi = 5.8) and the lowest was recorded in Italian ryegrass (Pf/Pi = 0.6). The Pf/Pi value of the other cover crops tested ranged from 2.6 to 3.9. Among all the cover crops tested only Italian ryegrass reduced the reproduction of *P. penetrans*. 

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